



PWMA-820
OPERATING INSTRUCTIONS

SINGLE VHF WIRELESS
BATTERY POWERED PA SYSTEM
WITH MP3 PLAYER



GENERAL DESCRIPTIONS

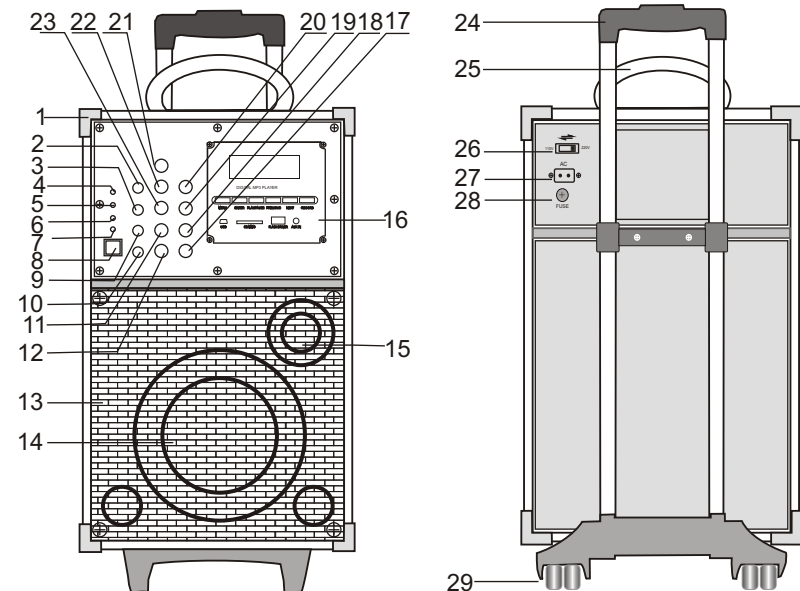
1. This ALL-IN-ONE karaoke system is suitable for karaoke, meeting, schools, presentation, aerobics etc.
2. Built-in 512MB MP3 player. With USB port which can play flash drive, Mp3 player etc. With SD/MMCcard reader. With 3.5mm AUX in jack which can connect with iPod, CD player etc. With recording function.
3. 8" woofer and 3" tweeter. 150WRMS, 300W peak power.
4. Built-in one set of wireless microphone.
5. Two MIC-IN, one guitar in and one 6.35mm audio in jacks.
6. Built-in 7AH/12V rechargeable battery which can work continuously for about 4 hours. Suitable for indoor and outdoor activities.
7. Treble, bass and echo controls
8. 110V/220V voltage switchable.
9. Telescoping handle and caster wheels. Easy for transportation.

IMPORTANT SAFEGUARDS

1. Correct power must be used. Don't use any other power except the specified one.
2. Don't drag the power cable when pull out the plug. Hold the plug to pull it out from socket.
3. Don't open chassis: it is very dangerous either open the chassis or put your hand inside the chassis. If the device is not under normal working, pull out the plug at once and contact your retailer or the nearest distributor.
4. Don't take volatile solvent such as toluene, alcohol, gasoline to clear the surface.
5. Please don't put it in an unventilated environment or at direct sunlight in summer.
6. Avoid moisture or rain.

PARTS DESCRIPTION

- | | |
|--------------------------------|------------------------------|
| 1. Metal corner for protection | 15. Tweeter |
| 2. Input jack for Mic 1 | 16. MP3 player |
| 3. Input jack for Mic 2 | 17. Bass control |
| 4. RF signal indicator | 18. Treble control |
| 5. Charge indicator | 19. Echo control |
| 6. Low battery indicator | 20. Mp3 volume control |
| 7. Power indicator | 21. Master volume control |
| 8. Power switch | 22. W/MIC 1 volume control |
| 9. GUITAR INPUT 1 | 23. MIC 2 volume control |
| 10. Audio input jack | 24. Trolley |
| 11. Guitar volume control | 25. Handle |
| 12. Audio volume control | 26. 110V/220V voltage switch |
| 13. Grille | 27. AC IN |
| 14. Woofer | 28. Fuse |



OPERATION

1. POWER SUPPLY

- 1) AC Power: Before operation, please confirm the voltage is same as the specified one marked on the label.
- 2) Built-in Rechargeable Battery: You can use built-in rechargeable battery without plug in AC power.
- 3) When the Low Voltage Indicator comes on yellow, it indicates the battery voltage is low. Please plug in AC power to charge the battery. When battery is fully charged, low voltage indicator will extinguish.
- 4) If the unit is not going to be used for a long time, please charge the battery every 2 months. Charging time is 8-10 hours for each time.

2. OPERATION OF AMPLIFIER

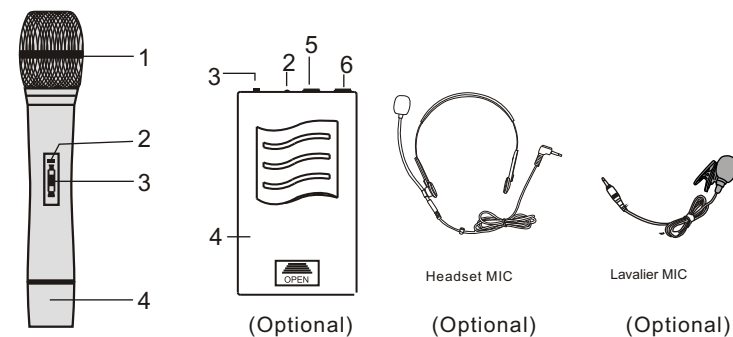
- 1) Use provided AC cord to connect this unit to suitable power socket. Pay attention to the voltage. Charge indicator will light. Or use built in battery.
- 2) Turn on amplifier power switch, power indicator comes on red.
- 3) Adjust MASTER volume control to suitable level.
- 4) Turn on handheld microphone, RF indicator on receiver will light. Wireless microphone volume can be adjusted by W/MIC 1.
- 5) Adjust BASS, TREBLE and ECHO to the suitable level. Now you are ready to talk.
- 6) Wired microphone(not included) can be connected to MIC 1 and MIC 2 jack. MIC volume can be adjusted by W/MIC 1 and MIC 2 volume control respectively. You can use the wireless MIC and the two wired MIC at the same time.

OPERATION

- 7) To play guitar, connect guitar to GUITAR IN jack. Guitar volume can be adjusted by Guitar Volume control.
- 8) External audio device can also be connected to AUDIO IN jack. Audio volume can be adjusted by AUDIO volume control.
- 9) To play MP3 player, refer MP3 player instruction.

3. OPERATION OF WIRELESS TRANSMITTER

- 1) Insert attached 9V battery into wireless transmitter.
- 2) Insert headset MIC or clip-on MIC to body pack transmitter MIC-IN jack. Adjust body pack transmitter volume switch to suitable level.
- 3) Move Power Switch to ON position. Power indicator will flash once then extinguish. RF indicator on amplifier will light to indicate receiving signal. Now you are ready to talk.
- 4) To mute the sound, move power switch to middle.
- 5) To turn off the transmitter, move power switch to OFF position.
- 6) If Power indicator of wireless transmitter lights red, it indicates the battery power is low. Please replace new battery.



1. MIC grill(capsule inside)
2. Power indicator
3. Power Switch
4. Battery cover
5. Volume control
6. MIC-IN jack

DIGITAL MP3 PLAYER

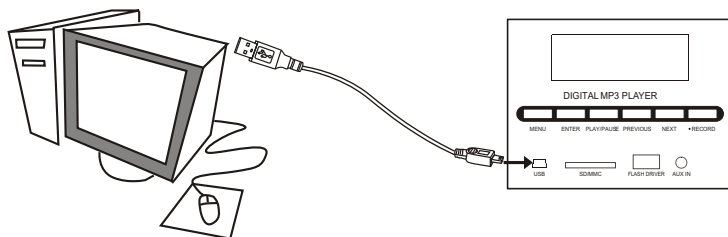
1) FEATURES

- (1) Big LCD screen with blue backlight.
- (2) Built-in flash memory, USB flash disc player and SD/MMC card reader.
- (3) A-B repeat and high quality recording function.
- (4) Support MP3 and WMA music files.
- (5) File administration function can support 5 levels folders.
- (6) Seven play mode: all, repeat all, one, repeat one, shuffle, folder, repeat folder.
- (7) Program upgrade function. End user can upgrade the MP3 player with our upgrade software.

2) DATA DOWNLOADING

CAUTION: Please turn off MP3 player before connecting with PC.

- (1) Use attached USB cable to connect MP3 player with PC.



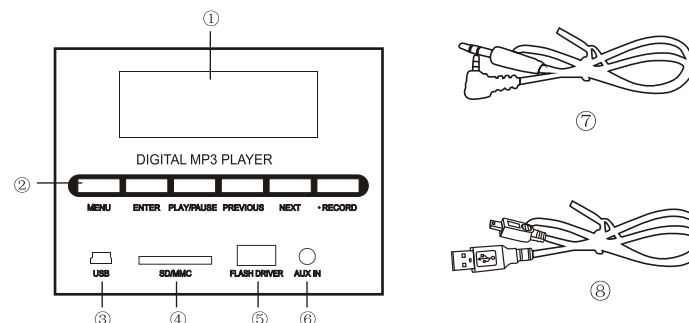
MP3 player can be powered by PC when connected with PC. (Please use win 2000 or above)

- (2) MP3 player LCD screen will display "USB ON LINE".

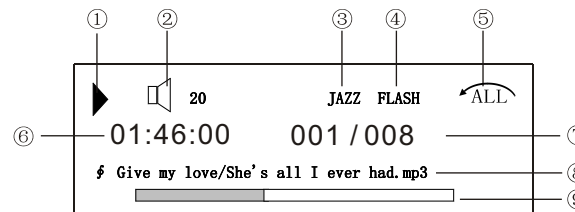
USB ON LINE

- (3) Two hard disc symbols will display in the PC screen. One is Flash, another is SD/MMC card. You can download music from your PC into Flash memory or SD/MMC card.
- (4) MP3 player can not play music when connected with PC. To play music please disconnect MP3 player from PC.

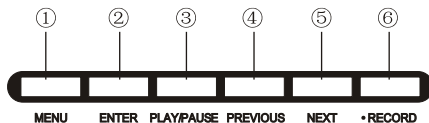
3) PARTS DESCRIPTION



- | | |
|-------------------|-----------------------|
| ① LCD screen | ⑤ Flash drive port |
| ② Function button | ⑥ 3.5mm audio in jack |
| ③ USB port | ⑦ 3.5mm/3.5mm cable |
| ④ SD.MMC slot | ⑧ USB cable |



- | | |
|---------------|-------------------------------------|
| ① Play State | ⑥ Play time |
| ② Volume size | ⑦ Playing song no. /Total songs no. |
| ③ EQ effect | ⑧ Playing song name |
| ④ Media | ⑨ Schedule of playing |
| ⑤ Play mode | |



- | | |
|-------------------|------------------------|
| ① Menu | ④ Last/Reward |
| ② Enter, Login | ⑤ Next/Forward |
| ③ Play/Pause/Stop | ⑥ Record/Delete/Repeat |

4) TURN ON/OFF PLAYER

First turn on amplifier power switch. Power LED indicator in front panel of main unit will light. Then press and hold PLAY/PAUSE button for more than 2 seconds. The LCD screen will light blue and display DIGITAL MP3 PLAYER.

To turn off player, press down PLAY/PAUSE and hold for 3 seconds. The screen shows POWER OFF. The Player is turned off.

5) VOLUME ADJUSTMENT

To adjust the volume, press MENU lightly and choose figure \square . Press PREVIOUS lightly to increase the volume. Press NEXT lightly to reduce the volume. Volume range is from 0 to 20. Press ENTER to confirm. Press MENU to choose the next function. It will automatically return to original interface if there is not any operation within 20 seconds.

6) EQ SET UP

To adjust EQ effect, press MENU and choose JAZZ. Press lightly PREVIOUS/NEXT to choose the EQ mode you like. There are 7 EQ modes: Flat/Jazz/Rock/Pops/Classic/Live/Dance. Press ENTER to confirm. Press MENU to choose the next function. It will automatically return to original interface if there is not any operation within 20 seconds.

7) MEDIA SELECTION

The MP3 Player's default setting is Flash when turned on. If you want to play SD card or USB, press MENU lightly and choose Flash. Then press PREVIOUS/NEXT lightly to choose CARD, USB or FLASH.

You can choose CARD only after you have inserted SD or MMC card into SD card slot. You can choose USB only after you have inserted USB device to USB slot. Press ENTER to confirm. Press MENU to choose the next function. It will automatically return to original interface if there is not any operation within 20 seconds.

8) PLAY MODE

To change play mode, press MENU lightly and choose \curvearrowright ALL. Then press PREVIOUS/NEXT lightly to choose the play mode you want. Press ENTER to confirm. Press MENU to choose the next function. It will automatically return to original interface if there is not any operation within 20 seconds.

- \curvearrowright ALL Play all tracks in selected memory format in order and stops.
- \curvearrowright ALL Play all tracks in selected memory format in order repeatedly.
- \curvearrowright ONE Play selected track and stops.
- \curvearrowright ONE Play selected track repeatedly.
- \curvearrowright SHUFFL Play all tracks in selected memory format in random order.
- \curvearrowright FOLDER Play all tracks within selected folder in order and then stops.
- \curvearrowright FOLDER Play all tracks within selected folder in order repeatedly.

9) START PLAYING

- (1) Press PLAY/PAUSE to open your MENU(catalog menu) and enter into navigation to choose whatever song you like. Press PLAY/PAUSE slightly. The player will start to play. Press again to pause.

OPERATION

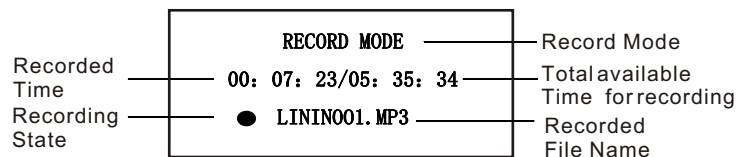
- (2) During playing press PREVIOUS to select the last song. Press and hold PREVIOUS for 2 seconds to reward the song.
- (3) During playing press NEXT to select the next song. Press and hold NEXT for 2 seconds to forward the song.

10) A-B REPEAT

During playing press RECORD lightly and choose repeat starting point A. In the top middle of LCD screen it will display A → . Press RECORD again to select the ending point B. In the top corner of LCD screen it will display A ↔ B. The player will repeat playing the music between A and B. Press RECORD for third time to cancel repeat.

11) RECORD

Recording can be started up only when MP3 Player is in Flash mode and in PAUSE or STOP mode. Press RECORD slightly to enter record mode. Screen will display as following.



Recording State: ■ Stop ● Recording || Pause Recording

During recording press PLAY lightly to pause recording. Press PLAY again to continue recording. Press RECORD lightly to stop recording and save the recorded file. Recorded files will be saved in LINEIN folder. Recorded files will be arranged like this :LINE001, LINE002...

OPERATION

When flash has no more space for recording, it will display DISK FULL. Available recording time depends on available Flash memory size and the recording sampling rate.

CAUTION: During recording do not turn off Mp3 player. Data could be lost and MP3 player may be damaged.

12) MENU

Press MENU and hold for 2 seconds, screen will display as following.

1. File menu
2. Rec menu
3. Settings
4. F/W Upgrade

Press PREVIOUS/NEXT to choose the option you want to set up. Press ENTER to confirm. Press MENU to return. It will automatically return to original interface if there is not any operation within 20 seconds.

(1) File menu

Select '**File menu**' by 'previous/next' keys and then 'enter' key . A menu of all folders/files in memory opens. Select track by 'previous/next' keys and then 'enter' key. Track loads but does not play until 'play' key is pressed. Or select folder by 'previous/next' keys and then 'enter' key. The folder opens showing all files within that folder. A track is then selected by 'previous/next' keys and then 'enter' key. Track loads but does not play until play key is pressed.

Menu key steps back one level (file-sub folder-folder-menu- normal operation). This Mp3 player can support 5 levels folders.

OPERATION

To delete song, first choose the song you like to delete. Then press RECORD to delete the song. Delete interface will display and ask you to confirm delete or not. Default is NO. Press PREVIOUS/NEXT to choose YES or NO. Press ENTER to confirm. Folder can not be deleted. During playing no song can be deleted.

(2) REC menu

When you choose REC MENU, you can choose recording sampling rate by pressing PREVIOUS/NEXT. There are four options: 32Kbps, 64Kbps, 128Kbps, 192Kbps. Default sampling rate is 192Kbps.

CAUTION: Recording can be functioned only in FLASH media.

(3) Settings

Choose SETTINGS and press ENTER. LCD screen will display as following.

- | |
|--|
| 1.Backlight time
2.Auto power off
3.Varispeed
4.Information |
|--|

-Backlight time: to set up backlight auto off time

Always on, 10s, 20s, 30s, 40s, 50s, 60s, 70s

-Auto off: to set up Mp3 player auto power off time. Default is OFF.

'Off': player switches off only when switched off manually on player or by amplifier being switched off on 'Power/Volume' control)

'10 mins'

'20 mins'

'30 mins'

In each case player switches off after stated time delay.

OPERATION

-Varispeed.

This function enables the users to adjust the playing speed of MP3 player. There are 7 different kinds of playing speed: -3,-2,-1,0,1,2,3. Default is 0.

- 3,-2,-1 slower speed
- 0 normal speed
- 1, 2, 3 faster speed

Press PREVIOUS/NEXT to choose the playing speed you need. Press ENTER to confirm.

CAUTION: Only in Flash media, you can adjust the playing speed. This function does not work when playing USB or SD/MMC card.

- Information: Choose this option and press ENTER. LCD screen will display as following.

System Information	
Firmware Ver 0.50	— Software version
Total: 0500MB	— Total flash memory
Free: 012MB	— Free flash memory

(4) F/W Upgrade--Software Upgrade

Download upgrade software into your PC. Connect the MP3 player to PC. Build Firm_UP folder in Flash. Copy upgrade file firmware.bin into Firm_UP folder.

Restart MP3 player. Enter into MENU mode and choose F/W Upgrade. Press ENTER. System will ask Upgrade or not. Default is NO. Press PREVIOUS/NEXT to choose YES. Press ENTER to confirm. Mp3 player will be turned off automatically after upgrade.

CAUTION: During upgrade do not turn off the machine.

SPECIFICATIONS

AMPLIFIER

Power supply: AC 110V/220V switchable
built-in 12V7AH rechargeable battery

Frequency response: 35Hz-20KHz

SPL: 94dB (1W/M)

T.H.D: <1%

Input wired mic: -58dBV 600

Speaker: 8" woofer, 3" tweeter

RMS power: 150W

Input jack: 2 x 1/4" MIC IN, 1x 1/4" GUITAR IN,
1x 1/4" AUDIO IN jack

RECEIVER

Carrier frequency range: 170-216 MHz.

RF sensitivity: $\leq -101\text{dB}$

Image rejection: $\geq 60\text{dB}$

S/N ration: $\geq 65\text{dB}$

Operation range: 100 ft

TRANSMITTER

Carrier frequency range: 170-216 MHz

RF power output: less than 10mW

Modulation level: 15K

Operation temperature: $-18^{\circ}\text{C}-60^{\circ}\text{C}$

Power supply: 9V

Unit Battery Life: Approx.3 Hours

Mic Battery Life: Approx. 45 Hours